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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/584,826	09/01/2006	John Michael Redmayne	JMR-0002	3955
23377 7590 03/01/2010 WOODCOCK WASHBURN LLP CIRA CENTRE, 12TH FLOOR 2929 ARCH STREET PHILADELPHIA, PA 19104-2891				
EXAMINER				
BARTLEY, KENNETH				
ART UNIT		PAPER NUMBER		
3693				
MAIL DATE		DELIVERY MODE		
03/01/2010		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/584,826

**Applicant(s)**

REDMAYNE, JOHN MICHAEL

**Examiner**

KENNETH L. BARTLEY

**Art Unit**

3693

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 14 October 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 165-322 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 165-322 are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/22)
- Paper No(s)/Mail Date \_\_\_\_\_

- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Election/Restrictions***

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:

**Subcombinations useable together**

I. Claims 165-170, 183-224, 237-264, 265-278, 291-327, 331-332, 336-337, 341-342, 346-347, 351-352, 356-357, 361-362, 366-367, and 371 are drawn a method, system, and product of determining a risk premium incorporated into a rate of return for a security and solving an option-theoretic model.

II. Claims 171-172, 174, 176-177, 179, 225-226, 228, 230-231, 279-280, 282, 284-285, 287, 328, 333, 338, 343, 348, 353, 358, 363, and 368 are drawn to a method, system, and product of generating a measure of a credit risk.

III. Claims 173, 175, 178, 227, 229, 232-233, 281, 283, 286, 329, 334, 339, 344, 349, 354, 359, 364, and 369 are drawn to a method, system, and product of generating a measure of covariance of two securities corresponding to a determined estimate of a default loss, where a first security ranks higher in priority.

IV. Claims 180-182, 234-236, 288-290, 330, 335, 340, 345, 350, 355, 360, 365, and 370 drawn to a method, system, and product of generating a correlation of two securities by relating estimates of a variance and expected default loss.

2. Inventions I-IV are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct if they do not overlap in scope and are not obvious variants, and if it is shown that at least one subcombination is separately usable.
3. Subcombinations I-IV do not overlap (i.e. are mutually exclusive) because each require a feature not required in the other.

- a. Subcombination I - separate embodiment of determining a risk premium incorporated into a rate of return for a security and solving an option-theoretic model.
  - b. Subcombination II - separate embodiment of generating a measure of a credit risk.
  - c. Subcombination III - separate embodiment of generating a covariance of two securities corresponding to a determined estimate of a default loss, where a first security ranks higher in priority.
  - d. Subcombination IV - separate embodiment of generating a correlation of two securities issued to a firm by relating estimates of a variance and expected default loss.
4. In the instant case, subcombination I has separate utility such as determining a risk premium incorporated into a rate of return for a security. Subcombination I can be practiced separately from subcombination II of generating a measure of credit risk as subcombination I determines a risk premium portion of a rate that represents a different risk component from that of a credit risk, where credit risk is a general indicator of credit quality and is different from risk premium. Subcombination I can be practiced separately from subcombination III as subcombination III determines a covariance between two securities based on a first security rank and subcombination I is directed at determining a risk premium rate component of a return. Subcombination I can be practiced separately from subcombination IV as subcombination IV determines a

variance of returns for two securities and subcombination I is directed at determining a risk premium component of a security.

5. Subcombination II has separate utility such as a method, system, and product of generating a measure of credit risk. Subcombination II can be practiced separately from subcombination I which determines a risk premium component in a rate of return component of a security. Subcombination II can be practiced separately from subcombination III that determines a covariance based on a first security rank where subcombination II generates a credit risk. Subcombination II can be practiced separately from subcombination IV where subcombination IV determines a variance of returns for two securities.

6. Subcombination III has separate utility as a method, system, and product of generating a covariance of two securities, where a first security ranks higher in priority. Subcombination III can be practiced separately from subcombination I which determines a risk premium in a rate of return. Subcombination III can be practiced separately from subcombination II of generating a credit risk. Subcombination III can be practiced separately from subcombination IV which determines a variance of returns for two securities. See MPEP § 806.05(d).

The examiner has required restriction between subcombinations usable together. Where applicant elects a subcombination and claims thereto are subsequently found allowable, any claim(s) depending from or otherwise requiring all the limitations of the allowable subcombination will be examined for patentability in accordance with 37 CFR 1.104. See MPEP § 821.04(a). Applicant is advised that if any claim presented in a

continuation or divisional application is anticipated by, or includes all the limitations of, a claim that is allowable in the present application, such claim may be subject to provisional statutory and/or nonstatutory double patenting rejections over the claims of the instant application.

7. Restriction for examination purposes as indicated is proper because all these inventions listed in this action are independent or distinct for the reasons given above and there would be a serious search and examination burden if restriction were not required because one or more of the following reasons apply:

- (a) the inventions have acquired a separate status in the art in view of their different classification;
- (b) the inventions have acquired a separate status in the art due to their recognized divergent subject matter;
- (c) the inventions require a different field of search (for example, searching different classes/subclasses or electronic resources, or employing different search queries);
- (d) the prior art applicable to one invention would not likely be applicable to another invention;
- (e) the inventions are likely to raise different non-prior art issues under 35 U.S.C. 101 and/or 35 U.S.C. 112, first paragraph.

**Applicant is advised that the reply to this requirement to be complete must include (i) an election of a invention to be examined** even though the requirement

may be traversed (37 CFR 1.143) **and (ii) identification of the claims encompassing the elected invention.**

The election of an invention may be made with or without traverse. To reserve a right to petition, the election must be made with traverse. If the reply does not distinctly and specifically point out supposed errors in the restriction requirement, the election shall be treated as an election without traverse. Traversal must be presented at the time of election in order to be considered timely. Failure to timely traverse the requirement will result in the loss of right to petition under 37 CFR 1.144. If claims are added after the election, applicant must indicate which of these claims are readable on the elected invention.

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Should applicant traverse on the ground that the inventions are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the inventions to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

8. Restriction for examination purposes as indicated is proper because all these inventions listed in this action are independent or distinct for the reasons given above and there would be a serious search and examination burden if restriction were not required because one or more of the following reasons apply:

- (a) the inventions have acquired a separate status in the art in view of their different classification;
- (b) the inventions have acquired a separate status in the art due to their recognized divergent subject matter;
- (c) the inventions require a different field of search (for example, searching different classes/subclasses or electronic resources, or employing different search queries);
- (d) the prior art applicable to one invention would not likely be applicable to another invention;
- (e) the inventions are likely to raise different non-prior art issues under 35 U.S.C. 101 and/or 35 U.S.C. 112, first paragraph.

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The election of an invention may be made with or without traverse. To reserve a right to petition, the election must be made with traverse. If the reply does not distinctly and specifically point out supposed errors in the restriction requirement, the election shall be treated as an election without traverse. Traversal must be presented at the time of election in order to be considered timely. Failure to timely traverse the requirement will result in the loss of right to petition under 37 CFR 1.144. If claims are added after



the election, applicant must indicate which of these claims are readable on the elected invention.

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9. A telephone call was made to Michael Stein (Reg. No. 34734) on February 25, 2010 to request an oral election to the above restriction requirement, but did not result in an election being made.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KENNETH L. BARTLEY whose telephone number is (571)272-5230. The examiner can normally be reached on Monday through Friday, 8:00 - 5:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jagdish Patel can be reached on (571) 272-6748. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/JAGDISH N PATEL/  
Primary Examiner of Art Unit 3693